

Recording MP3 files with Audacity

Downloading Audacity

Windows

Go to <http://audacity.sourceforge.net/download/windows>

Download Audacity and run the installer.

From that same page, you also have to download the LAME MP3 encoder:

This will download as a zip archive. Before you unzip it, create a folder named lame in the directory `C:/Program Files/Audacity/`

When asked for a location to extract the files, navigate to that. (Some zip utilities will allow you to create the folder when doing the extraction.

It really doesn't matter where that lame folder is, but you will have to locate it later when you export MP3's.

Macintosh

Go to <http://audacity.sourceforge.net/download/macosx>

Download Audacity, click on the .dmg file that downloads to mount the disk image and then drag Audacity to your Applications folder. (It really doesn't matter where it is, but that's the logical place to put it.)

From that same page, you also have to download the LAME MP3 encoder:

This will download as a stuffit archive. Before you unstuff it, create a folder named lame in the same place you put Audacity.

It really doesn't matter where that lame folder is, but you will have to locate it later when you export MP3's.

Recording Voice Narration

Look for speaker icon in lower right of the screen. Make sure it's not muted.

Launch Audacity.



If it doesn't open a file by default, under **File**, select **New**.

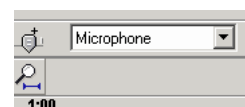
Save.

Maximize the window to get a better view of what you're doing.

Project rate: (at lower left corner)

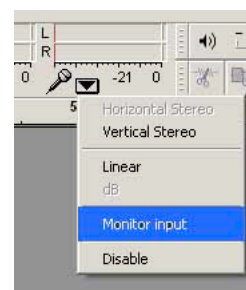
Default is 44100 (CD quality) If you think your students will be accessing over dialup, you can reduce this as far as 11025 (Telephone quality). Most students are accessing over broadband of some kind, MP3 provides some pretty distinct compression and in most cases, it will be streaming, reducing bandwidth needs anyway.

On far right make sure Microphone is selected as the source.



(On a Macintosh, you may have to go to System preferences/Sound and select the input, especially if your Mac doesn't have a microphone input and you're using a USB device)

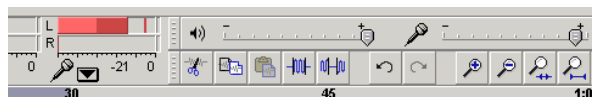
Find Microphone level in center of screen, click on small triangle to the right of microphone icon a menu.



Select Monitor input.

On volume level control to the right of meter; slide it all the way to the right.

Read something into the microphone. If meter hits the right side, back it off until the loudest sounds just miss the right side. You want it to be as loud as possible without being too loud.



Get ready to read the indented passage which follows.

Academic Computing will install and configure Audacity. call the Help desk at 3020

This handout and all my handouts are available on-line at <http://idea.uwosh.edu/nick/handouts.htm>

Note the controls at the left side of the screen. The green triangle is play. The red button is record. The yellow square is stop. The parallel vertical blue lines is pause. The forwards and backwards double triangles take you to the beginning and end of the the project.



On the controls on the left side of the top of the screen, click **record**, The red circle. You can click Pause, and then click it again to continue recording. When you're done reading, click **stop**.

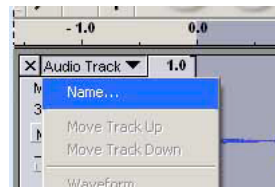
Read:

Providing students with access to a high-quality, affordable, comprehensive education that enables them to develop their general intellectual capacities, specific interests and abilities through academic programs and personalized student development services.

To hear what you've recorded, click **play**. Click stop to stop.

In order to do anything, you have to be stopped. Almost all functions will be unavailable if you're in Pause.

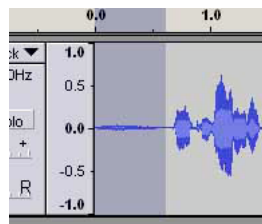
At top left of the track you just recorded, click the small triangle next to the label *Audio track* to reveal of menu. The first command is **Name**. In the dialogue box which pops up, type Voice.



There are probably some silent bits at the beginning and end of what you've recorded that you'll want to delete, indicated by a virtually flat line in the middle of the waveform.

Click and drag over the the silence at the beginning. The background will turn blue to indicate it's selected.

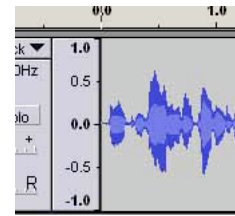
Click play to make sure there isn't anything you want to keep in the part you've selected. When you have part of the waveform selected and click play,



only the selected part will play.

To remove the selected section, press the **delete** key or select **Delete** from the **Edit** menu.

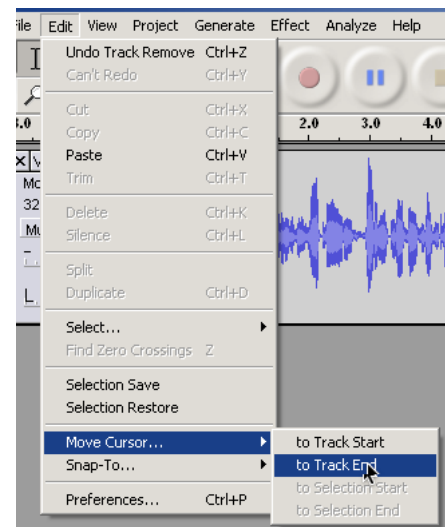
Notice that the waveform closes up to eliminate the time that was deleted. Repeat for the silence at the end.



Under the **Edit** menu, off the submenu **Move Cursor**, select **To track end**.

Again, get ready to read the indented passage below.

Click the record button to start and the stop button to stop.



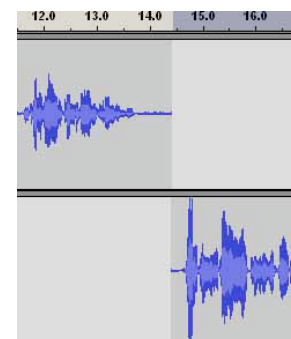
Read:

Fostering scholarly activities of faculty, students and staff related to teaching, research, intellectual activities, creative expression and service.

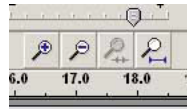
Sharing our intellectual and specialized capabilities with individuals, organizations and communities in our Wisconsin region and beyond in a way that is responsive to the needs of the people we serve.

You'll see that the new recording began where the cursor was, but created a new track.

This is generally good in doing multitrack music recording, but can probably get excessively complicated in a single voice recording.



To the right of the toolbar, click the fourth magnifying glass, the one with the longer line and the inner facing arrows. It will resize the wave form to show the whole project in the window.

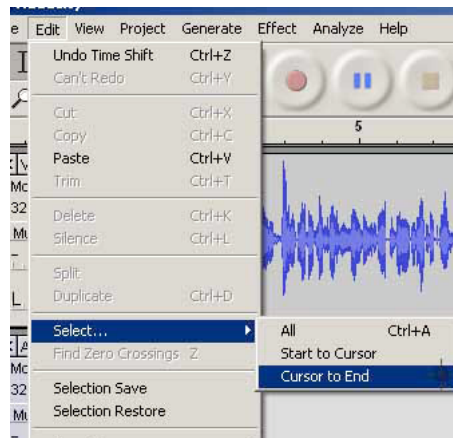


To combine the two tracks:

Click the cursor in the empty space before the recording in the second track. Under the **Edit** menu, off the **Move cursor** command, select **To Track start**.

Then under the **Edit** menu, off the **Select** command, select **Cursor to End**.

Then from the **Edit** menu, select **Cut**.



Click in the first track somewhere in the waveform and from the **Edit** menu, off the **Move Cursor** command, choose **To track end**.

From the **Edit** menu, choose **Paste**.

Click the box with the X at the top left corner of the second track to delete the track.



Now we'll insert a bit at the beginning.

On Track one (the only one left), click the button that says mute.

Get ready to read again.

Click record when you're ready and stop to stop.



Read:

The select mission of the University of Wisconsin Oshkosh is to:

As before this will record into a new track.

Select this entire passage, either by using the **Move cursor** and **Select** commands procedure we used above or simply by clicking and dragging over the new recording. **Cut**.

Place the cursor at the beginning of the first track. Paste. Notice that the passage is inserted and moves the rest of the track back.

Delete the empty track.

Listen to the whole track and delete and silent spots where you started and stopped recording

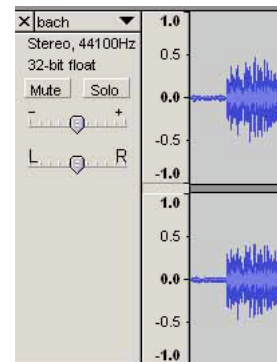
Adding a music background

Click the mute button on at the left of the Voice track so we can work with the music without hearing the narration.

Under the **Project** menu, select **Import Audio**.

Navigate to your My Documents folder and select Bach.wav. *n.b.* An audio CD inserted into your CD or DVD drive will be listed with all the other drives, each track will be a separate file.

Since this is a stereo recording, two tracks will be created, but they will only have one control panel. The label will be the name of the imported file.. Anything we do to one track will also occur on the other track.



Select and delete the few seconds of silence at the beginning of the track.

In this project we will want the music to play for about 5 seconds and then reduce in volume so the voice narration can be heard over it.

In order to get a better look at what we're doing. Select the first ten seconds. Click the third magnifying glass tool at the right of the toolbar with the shorter line and outward facing arrowhead. This will expand the selection to fill the window horizontally.

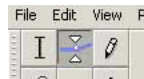


Since we'll be adjusting the volume, which is the vertical dimension of the waveform we can expand the waveform vertically to get a better look at what we're doing. Place the cursor at the bottom of the second stereo track. It will change to a two headed arrow.



Click and drag down to expand the stereo tracks to fill the entire screen.

Next, we'll use the **Envelope** tool, the second icon at the left of the toolbar:



*The Envelope tool can be a tricky manual skill at first. Remember, the first command under the **Edit** menu is **Undo**. If something you don't expect happens, use the undo command.*

Select the Envelope tool and click at the very top of the first stereo track at about 5 seconds. A white dot will appear at the top and bottom of both tracks. If you click within the track, the waveform (hence the volume) will be reduced vertically. If you place the white dot between the two triangles of the envelope cursor you can click and drag to increase or decrease the volume. In this case we want the track to stay at full volume.



Now at about one second later, click the envelope tool in either of the stereo tracks. You will create another series of white dots. Clicking on one of the white dots on the blue line, you can adjust the volume in the section following. To go under voice narration, you want to reduce it quite a bit, to about a tenth of the original volume. (you'll be able to go back and adjust it later if necessary)



Now using the second magnifying glass with the minus sign, zoom out so you can see the entire voice track. (The music track will be significantly longer).



We want the voice track to begin at the point where the music was reduced in volume.

Select the Time Shift tool, the second icon in the lower row on the tool bar:



Click in the voice track and drag it so that the beginning lines up with where the music track was reduced in volume.

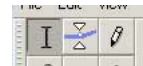


Click the mute button so it's no longer highlighted.

Listen to the narration, if the music is still too loud, using the Envelope tool, adjust the volume on the music track by moving the white dots.

Deleting the rest of the music track and fading out.

With the **Selection** tool. On the music track, Place the cursor about 10 seconds after voice narration.

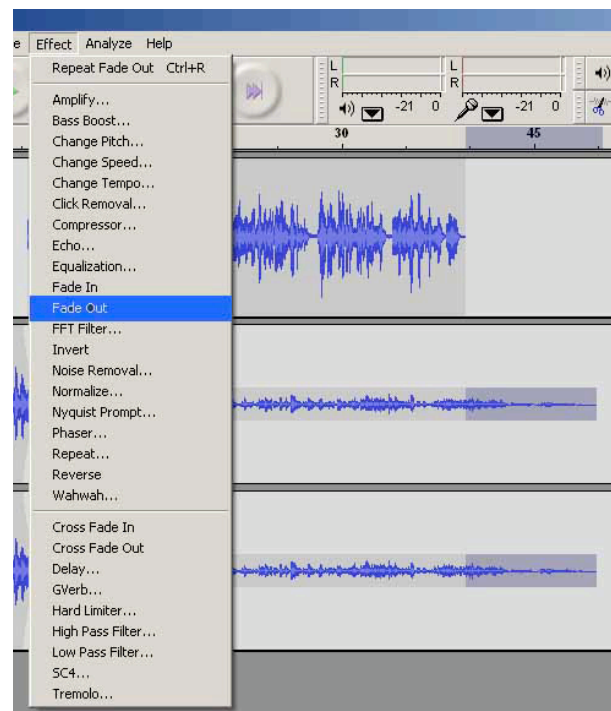


Under the **Edit** menu, off the **Select** command, choose **Cursor to End**

Press the **delete** key.

By clicking and dragging, select the music track from the end of the narration to the end of the music.

Under the **Effect** menu choose **Fade out**.



Save.

Export as MP3.

From under the **File** menu, select **Export as MP3**.

You'll get a dialogue that "Your tracks will be mixed down to two stereo channels in the exported file." That's exactly what you want. Click OK

You'll then get a standard file dialogue box. It will offer ".mp3" as a file name. You have to give it a file name before the .mp3. Make sure you don't delete the period or the mp3.

Click **Save**. You'll get a dialogue box explaining that Audacity doesn't export MP3's directly but uses the freely available LAME library, which you should have downloaded already. It will ask if you want to locate *lame_enc.dll* now.

Click Yes, and navigate to the folder *c:/Program Files/Audacity/lame/* (or wherever you put the LAME files) and select the file *lame_enc.dll* (on Mac, *LameLib*) and click OK.

You'll only have to do this once. Your computer will remember the location.

Your file will be saved as an MP3.

If you want to save your Audacity file with all it's tracks intact, you'll have to retain that as an Audacity Project.

You could bring the MP3 back into Audacity, but it will be mixed to two stereo tracks.